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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,720	06/12/2006	Kenneth Parry	36290-0394-00-US(222243)	6558
23973 7590 02/04/2010 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996			EXAMINER WOMACK, DOMINIQUE A	
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			02/04/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/582,720

Applicant(s)

PARRY ET AL.

Examiner

DOMINIQUE WOMACK

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date 20091013

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 26-46 are pending. Applicant's amendments filed on 10/13/2009 have been acknowledged.

Rejections

2. Any rejections and/or objections made in the previous office action, dated May 27, 2009, and not repeated below are hereby withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 26-30, 33, 35-36, 38, 43-44 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Schulze et al. [US Pat No. 3,708,952].**
5. **Regarding claims 26 and 46,** Schulze discloses a process for packaging particulate product such as powdered or granular material. Schulze discloses that various granular and flake-like food products such as instant coffee can be packaged by this process (col. 2, lines 16-20).
6. The steps of this packaging process include:

- a. Opening an initially flat pouch with a shot of a non-oxidizing gas such as carbon dioxide (col. 4, 39-44);
 - b. Filling the opened pouch with granular and flake-like food products and carbon dioxide (col. 3, lines 16-20; col. 4, lines 35-39); and
 - c. Sealing the pouch so that the food remains in a substantially oxygen free environment (col. 6, lines 7-11).
7. During the filling step, Schulze discloses that the package is over-purged with carbon dioxide and some carbon dioxide bleeds or escapes from the pouch (col. 4, lines 63-68). The bleeding of carbon dioxide from the pouch is being interpreted as the removal of a select volume of inert gas.
 8. **Regarding claims 27-29**, Schulze discloses the step of opening an initially flat pouch with a shot of a non-oxidizing gas such as carbon dioxide (col. 4, 39-44).
 9. **Regarding claim 30**, Schulze discloses filling the opened pouch with granular and flake-like food products and carbon dioxide (col. 3, lines 16-20; col. 4, lines 35-39).
 10. **Regarding claim 33**, Schulze discloses that the package is over-purged with carbon dioxide and some carbon dioxide bleeds or escapes from the pouch col. 4, lines 63-68).
 11. **Regarding claims 35-36**, Schulze discloses that the pouch is in a tight sealing engagement with the introduction means (col. 4, lines 54-59; Fig. 6). Figure 2, shows that the introductions means of Schulze has substantially flat opening.
 12. **Regarding claim 38**, Schulze discloses that a heat sealing bar is used to seal the pouch (col. 6, lines 7-10).

13. **Regarding claim 43**, Schulze discloses that the inert gas used in the packaging of the food stuff is carbon dioxide (col.4, lines 17-22).
14. **Regarding claim 44**, the process disclosed by Schulze is capable of packaging food with less than two percent oxygen in the package (col. 6, lines 21-25).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 31, 34, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze et al. [US Pat No. 3,708,952] in view of Laudenberg [US Pat No. 6,199,601].

19. Schulze is relied upon as above with respect to claim 26.

20. Schulze discloses that after the pouches are filled with food stuff, they are moved to a purging station where an additional shot of carbon dioxide is injected into the pouch to affect a final purge (col. 5, lines 21-25).

21. **Regarding claims 31 and 34**, Schulze fails to disclose that the foodstuff introduced into the container is liquid and that the step of purging the interior of the container is initiated after the step of introducing the liquid foodstuff.

22. Laudenberg relates to a method for filling flexible pouches.

23. Laudenberg discloses that flexible pouches, formed of plastic or foil, are used for packaging fluid. These pouches are being used for a variety of different fluids, including liquids, granular material, powders and the like (col. 1, lines 11-14). Laudenberg disclose that a pouch is filled with liquid. The pouch is then closed and nozzles inject has into the pouch to further purge any remaining oxygen from the pouch (col. 2, lines 1-5). Laudenberg also discloses that many liquids and dry products must be packaged in the absence of oxygen (col. 1, lines 19-20).

24. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the process of Schulze to package liquids. One of ordinary skill in the art would be motivated to use the process of Schulze to package liquids because Lundeberg shows that some liquids need to be packaged in the absence of oxygen.

25. **Regarding claim 42**, Schulze fails to disclose that the pouch is plastic.
26. Laudenberg discloses that flexible pouches, formed of plastic or foil, are used for packaging fluid. These pouches are being used for a variety of different fluids, including liquids, granular material, powders and the like (col. 1, lines 11-14).
27. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use a plastic pouch in the process of Schulze. One of ordinary skill in the art would be motivated to use the process of Schulze to package liquids because Lundeborg shows that it was well known in the art that plastic pouches were suitable for the packaging of food in a low-oxygen atmosphere.
28. **Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze et al. [US Pat No. 3,708,952] in view of Fang et al. [US Pat No. 4,736,572] in further view of Wilson [US Pat No. 4,027,456].**
29. Schulze is relied upon as above with respect to claim 26.
30. **Regarding claim 32**, Schulze fails to disclose a method wherein, the step of introducing a foodstuff into the container involves the introduction of a substantially solid foodstuff followed by the introduction of a substantially liquid foodstuff; and wherein the step of purging substantially all oxygen from the interior of the container is ceased after the step of introducing the substantially solid foodstuff into the container.
31. Fang et al. relates to the packaging of foodstuff and removing unwanted air from the packaging. Fang discloses that a bag can be first filled with vegetable bits and the first filling station and filled with a fluid at the second filling station (col. 3, lines 24-26). Fang discloses that

any larger volume of air left within the bag can easily cause rapid deterioration and/or spoilage of the foodstuff (col. 1, lines 28-30).

32. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the process of Schulze to package the solid and liquid food in a package with very little air. One of ordinary skill in the art would be motivated to package the solid and liquid food in a package with very little air because Fang discloses that any larger volume of air left within the bag can easily cause rapid deterioration and/or spoilage of the foodstuff.

33. Schulze in view of Fang fail to teach that the step of purging substantially all oxygen from the interior of the container is ceased after the step of introducing the substantially solid foodstuff into the container.

34. Wilson relates to an air-free packaging method.

35. Wilson discloses that a when a product entering a pouch at the filling station is air-free, it necessarily displaces a quantity of the steam air mixture of the pouch (col. 11, lines 15-19).

Liquid food products are interpreted as being air-free products.

36. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to stop the purging before the addition of the liquid food product in the process of Schulze in view of Fang et al. One of ordinary skill in the art would be motivated to stop the purging before the addition of the liquid food product in the process of Schulze in view of Fang et al because Wilson shows that air-free food necessarily displaces the remaining air and purging gas from the package.

37. **Claim 37 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze et al. [US Pat No. 3,708,952] in view of Wilson [US Pat No. 4,027,456].**
38. Schulze is relied upon as above with respect to claim 26.
39. **Regarding claim 37**, Schulze fails to disclose the use of mechanical squeezing to remove a selected volume of inert gas.
40. **Regarding claim 45**, Schulze fails to disclose that oxygen gas forms less than 1% of the volume of gas within the container.
41. Wilson relates to an air-free pouch packaging method.
42. Wilson discloses that the pouch is opened in an air-free environment. Afterwards, the pouch is closed by squeezing the side walls of the pouch together thereby purging a mixture of air and the air free-gas from the pouch (col. 2, lines 18-23). Wilson discloses that the squeezing can be accomplished by pinch rolls (col. 5, lines 9-15). Wilson discloses that a package that is substantially air-free with an infinitesimally amount of air present (col. 11, lines 21-34). Wilson also discloses that after the pouch was closed by applying a tension force to the mouth of the pouch which forces a purging gas-air mixture out of the mouth of the pouch, the volume of air remaining therein is reduced to an estimated 0.074 cc (col. 5, lines 21-27).
43. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use mechanically squeezing to remove a selected volume of inert gas and air from the package of Schulze. One of ordinary skill in the art would be motivated to use mechanically squeezing to remove a selected volume of inert gas and air from the package of Schulze because this helps insure that the package is substantially air-free.

44. **Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze et al. [US Pat No. 3,708,952] in view of Kühnle [US Pat No. 3,813,847].**

45. Schulze is relied upon as above with respect to claim 26.

46. **Regarding claim 39**, Schulze fails to teach the step of selecting a volume of inert gas so that the amount of agglomeration of discrete food pieces is reduced.

47. Kühnle relates to the process of manufacturing and filling containers with products such as foodstuffs (abstract).

48. Kühnle discloses that if containers contain relatively large lumps or agglomerates of sharp-edged material, if desired, a predetermined amount of a protective gas well known to those skilled in the art may be introduced into the container before it is closed (col. 2, lines 64-68).

49. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to leave a specified volume of inert gas in the package of Schulze in order to reduce agglomeration. One of ordinary skill in the art would be motivated to specified volume of inert gas in the package of Schulze in order to reduce agglomeration because Kühnle discloses that if containers contain relatively large lumps or agglomerates of sharp-edged material, if desired, a predetermined amount of a protective gas well known to those skilled in the art may be introduced into the container before it is closed.

50. **Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulze et al. [US Pat No. 3,708,952] in view of Shima et al. [US Pat No. 4,891,007].**

51. Schulze is relied upon as above with respect to claim 26.

52. **Regarding claims 40-41**, Schulze fails to disclose the packaging of a cereal based food.

53. Shima relates to the method of packaging and storing agricultural products.

54. Shima discloses that in the long period storage of grains, including white rice, whereat, barley, oats and rye there are many problems such as deterioration of freshness by oxidation, the loss of their taste and flavor, and decline of the quality by the generation of fungi (col. 1 lines 18-24). Any of these agricultural products are filled into a container along with an inert gas. Filling an inert gas together with the product prevents flavor loss through oxidation and generation of bacteria, mold, and insects (col. 4, lines 3-9).

55. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the process of Schulze to package grains, including white rice, wheat whereat, barley, oats and rye. One of ordinary skill in the art would be motivated to use the process of Schulze to package grains, including white rice, wheat whereat, barley, oats and rye because Shima shows that including an inert gas in packaging white rice, whereat, barley, oats and rye prevents flavor loss.

Response to Arguments

56. Applicant's arguments filed October 13, 2009 have been fully considered but they are not persuasive.

57. Applicant argues that Schulze (US Pat No. 3,708,952) teaches the concept of overpurging and that overpurging cannot be equated to over-inflating because there is no disclosure of the pouch of Schulze being over-inflated. However, the overpurging of the pouch of Schulze does require the amount of carbon dioxide to exceed a certain volume before it bleeds out of the pouch. Applicant has not specified what the "desired volume" is so the amount of carbon dioxide that it takes to fill the pouch before it bleeds out is interpreted to be "over-inflating" "beyond a desired volume" to read on claim. Furthermore, applicant does not claim that the selected volume remaining in the container is equal to the desired volume.

Conclusion

58. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

59. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

60. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOMINIQUE WOMACK whose telephone number is (571) 270-7366. The examiner can normally be reached on Monday-Thursday, 9:30am-6:00pm.

61. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

62. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. W./
Dominique Womack
Examiner, Art Unit 1794

25 January 2010

/Jennifer McNeil/
Supervisory Patent Examiner, Art Unit 1794